Suite 300, Landmark Center 1299 Farnam Street Omaha, NE 68102

# AUDIT REPORT FOR MEXICO NOVEMBER 5 THROUGH NOVEMBER 26, 2001

## INTRODUCTION

### **Background**

This report reflects information that was obtained during an audit of Mexico's meat inspection system from November 5 through November 26, 2001. Eleven of the 29 establishments certified to export meat to the United States were audited. Five of these were slaughter establishments; the other six were conducting processing operations.

The last audit of the Mexican meat inspection system was conducted in May 2001. Twelve establishments were audited: eight were acceptable (TIF-105, 111, 120, 66, 86, 114, 169, and 271), three were evaluated as acceptable/re-review (TIF-74, 158, and 209), and one was unacceptable (TIF-190). Major concerns reported at that time were: inadequate documentation of pre-operational and operational sanitation findings; several procedures that allowed potential cross-contamination in slaughter and processing operations; rust, flaking paint and condensation over exposed product; personal hygiene was inadequate for some facilities and habits; and improper storage of product was evident in some areas.

At the time of this audit, Mexico was eligible to export fresh and processed beef and pork to the United States. Poultry products made from poultry imported directly from the United States were also eligible for export back to the United States; however poultry inspection controls were not within the scope of this audit.

During calendar year 2001 through October 31, Mexican establishments exported 12,946,864 pounds of beef and pork to the U.S. Port-of-entry (POE) rejections totaled 4,215 pounds for violative net weights, transportation damage, contamination and labeling defects.

#### PROTOCOL

This on-site audit was conducted in four parts. One part involved visits with Mexican national meat inspection officials to discuss oversight programs and practices, including enforcement activities. The second entailed an audit of a selection of records in the meat inspection headquarters facilities preceding the on-site visits. The third was conducted by on-site visits to establishments. Seven establishments were randomly selected for records audits; eight establishments were selected randomly for on-site audits and three more were visited to assess improvements relative to past performance, having been evaluated as re-

review. The fourth was a visit to four of seven private laboratories approved by Secetaria de Agricultura, Ganderia, Desarrollo Rural, Pesca y Alimentacion (SARGAPA) for microbiological testing of meat products exported to the United States.

Mexico's program effectiveness was assessed by evaluating five areas of risk: (1) sanitation controls, including the implementation and operation of Sanitation Standard Operating Procedures (SSOPs), (2) animal disease controls, (3) residue controls, (4) slaughter/processing controls, including the implementation and operation of Hazard Analysis and Critical Control Point (HACCP) systems and the *E. coli* testing program, and (5) enforcement controls, including the testing program for *Salmonella* species.

During all on-site establishment visits, the auditor evaluated the nature, extent, and degree to which findings impacted on food safety and public health, as well as overall program delivery. The auditor also determined if establishment and inspection system controls were in place. Establishments that do not have effective controls in place to prevent, detect and eliminate product contamination/adulteration are considered unacceptable and therefore ineligible to export products to the U.S., and are delisted accordingly by the country's meat inspection officials.

#### **RESULTS AND DISCUSSION**

## **Summary**

Effective inspection system controls were found to be in place, except as otherwise noted, in all of the eleven establishments audited; two of these (TIF-105 and 188) were recommended for re-review. In addition, in the on-site audits of establishments TIF-105 and 111, although direct observation of the establishment operations revealed no major issues, the discovery of establishment-paid employees conducting post-mortem inspections and making carcass dispositions, resulted in the establishments being evaluated as unacceptable and subsequently delisted until such time as adequate staffing with government-paid inspectors could be accomplished. The records audit of TIF-152 revealed the same type of situation involving establishment-paid employees conducting post-mortem inspections and making carcass dispositions. TIF 152 was also evaluated as unacceptable and subsequently delisted until such time as adequate staffing with government-paid inspectors could be accomplished. Details of audit findings, including compliance with HACCP, SSOPs, and testing programs for *Salmonella* and generic *E. coli*, are discussed later in this report.

As stated above, major concerns had been identified during the last audit of the Mexican meat inspection system, conducted in May 2001. During this new audit, the auditor determined that the concerns had been addressed and corrected.

- Inadequate documentation of pre-operational and operational sanitation was corrected except for the recording of preventive action, which is still weak in some establishments.
- The procedures that led to problems of cross contamination were corrected.

- Rust and flaking paint were corrected, but several establishments were found to have serious problems with condensation above exposed product (TIF-105, 104, 74, 66 and 120).
- Personal hygiene problems and inadequate equipment sanitizing were corrected.
- Product storage faults were solved, to include ice on boxes and boxes on the floor. Entrance Meeting

On November 5, an entrance meeting was held in the Mexico City offices of the Secetaria de Agricultura, Ganaderia, Desarrollo, Pesca y Alimentacion (SARGAPA), and was attended by Dr. Gildordo Manuel Galvez, Medico Veterinario Zootechnista; Dr. Concepcion Silva Mora, Official Supervisor Federal Slaughter Establishments, SARGAPA; Mr. Salvador Trejo, Agricultural Specialist, U.S. Embassy; Mr. Dennis Reisen, Translator, USDA, FSIS; and Dr. M. Douglas Parks, International Audit Staff Officer, USDA, FSIS. Topics of discussion included the following:

- 1. Itinerary for on-site and records only audits.
- 2. Country profile and new personnel in SARGAPA.
- 3. Records of enforcement for the past year.
- 4. Veterinarians and inspectors must be paid by the Government of Mexico, not by the establishments. SARGAPA officials stated that they felt this problem had been rectified.
- 5. Monthly visits to establishments by SARGAPA supervisors.
- 6. Species testing of finished product eligible to be shipped to United States.

### Headquarters Audit

There had been some changes in the organizational structure or upper levels of inspection staffing since the last U.S. audit of Mexico's inspection system in May 2001.

To gain an accurate overview of the effectiveness of inspection controls, FSIS requested that the inspection officials who normally conduct the periodic reviews for compliance with U.S. specifications lead the audits of the individual establishments. The FSIS auditor (hereinafter called "the auditor") observed and evaluated the process.

The auditor conducted a review of inspection system documents pertaining to the establishments listed for records review. This records review was conducted at the headquarters or the inspection service or at a district or regional office. The records review focused primarily on food safety hazards and included the following:

• Internal review reports.

- Supervisory visits to establishments that were certified to export to the U.S.
- Training records for inspectors and laboratory personnel.
- Label approval records such as generic labels, and animal raising claims.
- New laws and implementation documents such as regulations, notices, directives and guidelines.
- Sampling and laboratory analyses for residues.
- Pathogen reduction and other food safety initiatives such as SSOPs, HACCP programs generic *E. coli* testing and *Salmonella* testing.
- Sanitation, slaughter and processing inspection procedures and standards.
- Control of products from livestock with conditions such as tuberculosis, cysticercosis, etc., and of inedible and condemned materials.
- Export product inspection and control including export certificates.
- Enforcement records, including examples of criminal prosecution, consumer
  complaints, recalls, seizure and control of noncompliant product, and withholding,
  suspending, withdrawing inspection services from or delisting an establishment that is
  certified to export product to the United States. These documents were asked for and
  were to be produced for the exit conference.

The following concerns arose as a result the examination of these documents:

- Labels submitted for approval in Washington (but approval not yet received) were being used to send samples to the United States and had the U.S. mark of inspection on them in establishment TIF-271.
- In almost all establishments, preventive action was not being recorded in the SSOP (TIF-158, 209, 105, 188, 271, 169, 111, 74, 152, 237, 100, and 118).
- Preventive action is not recorded in several establishments for the HACCP programs (TIF-158, 105, 271, 111, 120, 152, and 118).
- Pre-shipment review is not understood and is not being done in almost all establishments (TIF-209, 104, 188, 271, 169, 111, 74, 152, 100, and 95).
- HACCP record keeping is incomplete in the area of monitoring and corrective action in a few establishments (TIF-95, 188, and 120).

## **Government Oversight**

Inspection veterinarians and inspectors in some establishments certified by Mexico as eligible to export meat products to the United States were not being paid by SARGAPA, but were being paid by the establishment. There were three slaughter establishments (TIF-105, 111, and 152) and there were two processing only establishments (TIF- 209 and 100) that were revealed to be following this procedure.

## **Establishment Audits**

Twenty-nine establishments were certified to export meat products to the United States at the time this audit was conducted. Eleven establishments were visited for on-site audits. In all of the establishments visited, except as otherwise noted, both SARGAPA inspection system controls and establishment system controls were in place to prevent, detect and control contamination and adulteration of products. Two establishments were evaluated as acceptable/re-review (TIF-105 and 188). This calls for a mandatory review on the next scheduled audit. In addition, in the on-site audits of establishments TIF-105 and 111, although direct observation of the establishment operations revealed no major issues, the discovery of establishment-paid employees conducting post-mortem inspections and making carcass dispositions resulted in the establishments being evaluated as unacceptable and subsequently delisted until such time as adequate staffing with government-paid inspectors could be accomplished. The records audit of TIF 152 revealed the same type of situation involving establishment-paid employees conducting post-mortem inspections and making carcass dispositions. TIF 152 was also evaluated as unacceptable and subsequently delisted until such time as adequate staffing with government-paid inspectors could be accomplished. The establishments and the problems in the two acceptable/re-review establishments were as follows:

#### TIF 105

- Condensate on the overhead structures above exposed product in the boning room.
- A carton for exposed product was taken from the floor and put into production.
- The viscera buggy was not cleaned and sanitized properly between uses.
- The carcass split saw and the brisket saw were not cleaned and sanitized properly between uses.
- Improper bung removal resulting in contamination of the inside pelvic surfaces.
- Approximately 50% of the livers had a piece of inedible gall bladder left in place.

### **TIF 188**

- Plastic strip doors had residues from previous days' uses in production areas.
- Metal racks for use with exposed product, ready for use and in use, had residues from previous days' uses.
- A scale used for exposed product had residues from previous days' uses.
- HACCP records were incomplete for monitoring, corrective and preventive action, and verification methods.
- HACCP plan not dated and signed.
- No HACCP pre-shipment review being conducted.

## **Laboratory Audits**

During the laboratory audits, emphasis was placed on the application of procedures and standards that were equivalent to U.S. requirements. Information was also collected about the risk areas of government oversight of accredited, approved, and private laboratories; intralaboratory quality assurance procedures, including sample handling; and methodology.

The following laboratories were audited:

- Laboratorio Central Regional de Monterrey in Monterrey, N.L.
- Sigma Alimentos Noreste in Monterrey, N.L.
- Laboratorio Central Regional de Merida in Merida, Yucatan
- Laboratorio de Patologia de Tecaa de Aguascalientes in Aguascalientes

These laboratories were audited between November 14 and 19, 2001 by Mr. Victor Cook, an FSIS microbiologist. Except as noted below, effective controls were in place for sample handling and frequency, timely analysis, data reporting, tissue matrices for analysis, equipment operation and print-outs, minimum detection levels, recovery frequency, percent recoveries, and corrective actions. The methods used for the analyses were acceptable. No compositing of samples was done. The check sample program did meet FSIS requirements.

Mexico's microbiological testing for *Salmonella* was being performed in these private laboratories. The auditor determined that the system met the criteria established for the use of private laboratories under FSIS's Pathogen Reduction/HACCP rule. These criteria are:

- 1. The laboratories have been accredited/approved by the government, accredited by third party accrediting organization with oversight by the government, or a government contract laboratory.
- 2. The laboratories have properly trained personnel, suitable facilities and equipment, a written quality assurance program, and reporting and record-keeping capabilities.
- 3. Results of analyses are being reported to the government or simultaneously to the government and establishment.

Problems encountered in these laboratories are as follows:

- Some materials needed for *Salmonella* and *Listeria* testing were not readily available in some laboratories, e.g., improper sponges for swabbing (SARGAPA responsibility) and horse blood for media production.
- A few samples were not reaching the laboratory in a timely manner; e.g., one day of sample collection must be received and started within one day in the laboratory.
- The two labs in Monterrey were using 25 grams of product for *Salmonella* testing of Ready-To-Eat product. FSIS requires a sample size of 325 grams.
- Some aspects of the testing methodology used in the laboratories needed to be submitted to the U.S. for equilivalency determination. Accordingly, two labs were using tube media instead of api-20E for biochemical confirmation of *Salmonella*.

## **Establishment Operations by Establishment Number**

The following operations were being conducted in the eleven establishments:

Beef slaughter and boning - three establishments (TIF-105, 111, and 120) Pork slaughter and boning – two establishments (TIF-66 and 74) Beef boning – two establishments (TIF-104 and 188) Pork boning – one establishment (TIF-271)
Beef, pork and chicken processing – two establishments (TIF-169 and 209)
Pork and turkey processing – one establishment (TIF-158)

### SANITATION CONTROLS

Based on the on-site audits of establishments, Mexico's inspection system had controls in place for chlorination procedures, back siphonage prevention, sanitizers, separation of establishments, pest control monitoring, temperature control, operations work space, inspector work space, ventilation, facilities approval, product contact equipment, antemortem facilities, outside premises, sanitary dressing procedures, product transportation and preoperational sanitation.

## Sanitation Standard Operating Procedures (SSOPs)

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment A).

The SSOPs were found to meet the basic FSIS regulatory requirements, with only occasional minor variations:

- Preventive action was not recorded in almost all establishments (TIF-158, 209, 105, 188, 271, 169, 111, and 74). The inspection officials and the establishment personnel now understand the importance of these procedures and pledged to implement actions immediately to correct this problem.
- Condensation on overhead structures above exposed product continues to be a problem in some establishments (TIF-104, 105, 74, 66, and 120). Company personnel put corrective action in place immediately.
- Operational sanitation was conducted in all establishments and records were kept, but two establishments had not developed written procedures (TIF-111 and 152). This was corrected immediately.

### ANIMAL DISEASE CONTROLS

Mexico's inspection system had controls in place to ensure adequate animal identification, ante-mortem and post-mortem inspection procedures and dispositions (with the exception of inspections and dispositions being made by company-paid employees in establishments TIF-105, 111, and 152), condemned and restricted product control, and procedures for sanitary handling of returned and rework product.

There were reported to have been no outbreaks of animal diseases with public-health significance since the previous U.S. audit.

## **RESIDUE CONTROLS**

Mexico's National Residue Testing Plan for 2001 was being followed, and was on schedule. The Mexican inspection system had adequate controls in place to ensure compliance with sampling and reporting procedures and storage and use of chemicals

### SLAUGHTER/PROCESSING CONTROLS

The Mexican inspection system had controls in place to ensure adequate ante-and post-mortem inspection procedures and dispositions (with the exception of inspections and dispositions being made by company-paid employees in establishments TIF-105, 111, and 152), control and disposition of dead, dying, diseased or disabled animals, humane handling and slaughter, boneless meat reinspection, identification of ingredients, control of restricted ingredients, formulations, packaging materials, laboratory confirmations, label approvals, and inspector monitoring.

## **HACCP Implementation**

All establishments approved to export meat products to the U.S. are required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment B).

The HACCP programs were found to meet the basic FSIS regulatory requirements with the following exceptions:

- Pre-shipment review was not well understood nor in place in several establishments (TIF-209, 104, 188, 271, 169, 111, 74, 152, 100, and 95).
- The HACCP plan was not signed and dated in three establishments (TIF-188, 271, and 152)
- Documentation of values recorded for CCP monitoring was weak in two establishments (TIF-188 and 66)
- All three parts of verification procedures were not addressed in three establishments (TIF-209, 188 and 111)
- Preventive action was not being recorded nor were there any procedures to be followed in case of a failure to meet a critical limit in many establishments (TIF-158, 105, 271, 111, 120, 152 and 118).
- A CCP in one plant was not clearly written and needed to be revised (TIF-169).

These problems were discussed at length with inspection personnel and with establishment officials and they were all to be corrected immediately.

## Testing for Generic E. coli

Mexico has adopted the FSIS regulatory requirements for E. coli testing.

Six of the establishments audited were required to meet the basic FSIS regulatory requirements for generic *E. coli* testing, and were audited and evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment C).

The *E. coli* testing programs were found to meet the basic FSIS regulatory requirements with the following exceptions:

- The sampler was not designated in the program in establishment TIF-111.
- The sampling location in the plant was not designated in the plan in establishment TIF-111.
- The sampling frequency was done correctly but not written into the plan in establishments TIF-111 and 152.
- Random selection of the carcass to be sampled was not done in establishments TIF-105 and 120.

These problems were scheduled to be corrected as soon as possible.

## **ENFORCEMENT CONTROLS**

## **Inspection System Controls**

Except as otherwise noted, the SARGAPA inspection system controls [control of restricted product and inspection samples, boneless meat re-inspection, shipment security, including

shipment between establishments, prevention of commingling of product intended for export to the United States with domestic product, monitoring and verification of establishment programs and controls (including the taking and documentation of corrective actions under HACCP plans), inspection supervision and documentation, the importation of only eligible livestock or poultry from other countries (i.e., only from eligible countries and certified establishments within those countries), and the importation of only eligible meat or poultry products from other counties for further processing] were in place and effective in ensuring that products produced by the establishment were wholesome, unadulterated, and properly labeled. In addition, adequate controls were found to be in place for security items, shipment security, and products entering the establishments from outside sources.

## Testing for Salmonella Species

Six of the establishments audited were required to meet the basic FSIS regulatory requirements for *Salmonella* testing, and were evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment D).

Mexico has adopted the FSIS regulatory requirements for *Salmonella* testing with exception of the following equivalent measures:

The inspection personnel collected samples for Salmonella testing. Testing for *Salmonella* was performed both in a government laboratory (CENAPA) and also in certified private laboratories. SAGARPA officials use the FSIS method for *Salmonella* analysis.

SARGAPA has assured FSIS that Mexico's Salmonella testing program was the same as that employed by FSIS, with the exception of the following equivalent measures:

- The approval/accreditation process for private laboratories is done in accordance with Mexico's Federal Animal Health Law, the Federal law of Metrology and Standardization, the Criteria for the Operation of Animal Health Testing Laboratories, and the Characteristics and Specifications for Facilities and Equipment for Animal Health Testing and/or Analyzing Laboratories. The approval/accreditation process and on-going verification are conducted by Mexico (SARGAPA).
- Private laboratories have properly trained personnel, suitable facilities and equipment, a written quality assurance program, and reporting and record-keeping facilities.
- Test results are sent from private laboratories directly to the General Directorate of Animal Health of the Government of Mexico.

### **Species Verification Testing**

At the time of this audit, Mexico was not exempt from the species verification-testing requirement. The auditor verified that species verification testing was being conducted in accordance with FSIS requirements. In all establishments visited on this audit, species testing was done on incoming product or residue samples of incoming animals not on finished product. Those establishments that have multiple species and processed products were told to start species testing on finished product.

### Monthly Reviews

FSIS requires documented supervisory visits by a representative of the foreign inspection system to each establishment certified as eligible to export to the United States, not less frequently than one such visit per month, during any period when the establishment is engaged in producing products that could be used for exportation to the United States.

These reviews were being performed by the Mexican equivalent of Area Supervisors. All were veterinarians. Dr. Alejandro Jiménez was in charge of the federally inspected establishments. The internal reviewers reported their findings to him and he then decided what action should be taken. Routine reports were sent by mail but in the case of noncompliance, results were conveyed by telephone.

The internal review program was applied equally to both export and non-export establishments. Annually scheduled reviews were announced in advance and were conducted at times by individuals and at other times by a team of reviewers. Reviews organized by State Supervisors were sometimes announced, sometimes not. They were conducted at least once monthly in establishments producing and exporting product to the U.S. The records of audited establishments were kept in the inspection offices of SAGARPA in Mexico City, in State offices, and in the establishments, and were routinely maintained on file for a minimum of one year.

In the event that an establishment is found, during one of these internal reviews, to be out of compliance with U.S. requirements, the supervising inspector performing the review would immediately inform SAGARPA headquarters. SAGARPA would then initiate a prompt review of that particular establishment. If, during this audit, deficiencies are found to persist, the establishment is removed from the list of establishments certified as eligible to export to the U.S. Monthly reviews were found to be complete in all establishments visited.

### **Enforcement Activities**

The "Federal Animal Health Act" gave SAGARPA enforcement responsibilities and duties. One portion of this document deals with "Complaints" and the other with "Administrative Sanctions". In case of complaints, the Secretary of Agriculture orders the investigation of the complaint, which must be accomplished within 15 days. Administrative sanctions are imposed in the form of letters and fines. Fines can range from 500 to 100,000 Mexican pesos (approximately U.S. \$55 to \$11,000). Other sanctions, in cases of repeat violators, include

double fines, then temporary and final suspension. After one violation the individual is suspended from producing product in the meat industry. After a second violation, the violator is not allowed to work in the meat industry.

There were no investigations or prosecutions during the last year.

### Exit Meetings

An exit meeting was conducted in Mexico City on November 26, 2001. The Mexican participants were; Dr. Jorge Padilla Sanchez, Director de Importacion, Exportacion Services; Dr. Ricardo Flores Castro, Director de Campanas Zoosanitarias; Mr. Luis Sanchez Sanabria, Subdirector Regionalization Encargado Direction de Vigilancia; Dr. Alejandro Jimenez, Head of Exporting Plants; Mr. Todd Drennan, Senior Agricultural Attaché, USDA, U.S. Embassy; Mr. Dennis Reisen, Translator, USDA, FSIS; and Dr. M. Douglas Parks, International Audit Staff Officer, USDA, FSIS. Ms. Sally Stratmoen, Chief, Equivalence and Planning Section, International Policy Division in Washington, DC, participated via a speakerphone. The following topics were discussed:

- 1. The country profile was requested and will be forthcoming.
- 2. The record of enforcement activities for the past year was conveyed verbally to the auditor.
- 3. The establishments that were put in acceptable/re-review status (TIF-105 and 188) were discussed in detail; and a commitment to correct all deficiencies immediately was made by SARGAPA officials.
- 4. The auditor pointed out a weakness in the supervisors concerning HACCP understanding, implementation and monitoring. SARGAPA officials said more training would be forthcoming.
- 5. The issue of veterinarians and inspectors in the establishments being paid by the establishment was discussed at length. See item 6 below.
- 6. The auditor presented a letter from FSIS International Policy in Washington D.C. that delisted the three slaughter establishments that had veterinarians and /or inspectors making dispositions in the establishments and their salary is being paid by the establishment directly (TIF-105, 111 and 152). Ms. Sally Stratmoen, Chief, Equivalence and Planning Section, International Policy Division in Washington, DC, via a speakerphone, explained the letter and the reason behind the delistments to SARGAPA officials. The SARGAPA officials said that they would have to have time to study the letter and its implications and they would respond as soon as possible.

#### CONCLUSION

The inspection system of Mexico was found to have effective controls, except as noted above, to ensure that product destined for export to the United States was produced under conditions equivalent to those, which FSIS requires in domestic establishments. The major concern for this audit was the continuing practice of the establishments paying the salary of

some of the veterinarians and inspectors working in their establishments and making disposition of product decisions. The U.S. sees this as a possible conflict of interest and asks that the policy be changed. Eleven establishments were audited: seven were acceptable, two were evaluated as acceptable/re-review, and three were unacceptable because of the salary issue and were delisted by officials in Washington, D.C. The deficiencies encountered during the on-site establishment audits, in those establishments which were found to be acceptable, were adequately addressed to the auditor's satisfaction.

Dr. M. Douglas Parks International Audit Staff Officer (signed) Dr. M. Douglas Parks

### **ATTACHMENTS**

- A. Data collection instrument for SSOPs
- B. Data collection instrument for HACCP programs
- C. Data collection instrument for E. coli testing
- D. Data collection instrument for Salmonella testing
- E. Laboratory Audit Form
- F. Individual Foreign Establishment Audit Forms
- G. Written Foreign Country's Response to the Draft Final Audit Report (when it becomes available)

## **Data Collection Instrument for SSOPs**

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written SSOP program.
- 2. The procedure addresses pre-operational sanitation.
- 3. The procedure addresses operational sanitation.
- 4. The pre-operational procedures address (at a minimum) the cleaning of food-contact surfaces of facilities, equipment, and utensils.
- 5. The procedure indicates the frequency of the tasks.
- 6. The procedure identifies the individuals responsible for implementing and maintaining the activities.
- 7. The records of these procedures and any corrective action taken are being maintained on a daily basis.
- 8. The procedure is dated and signed by the person with overall on-site authority.

The results of these evaluations were as follows:

	1.Written program	2. Pre-op sanitation	3. Oper. sanitation	4. Contact surfaces	5. Frequency	6. Responsible indiv.	7. Docu- mentation	8. Dated and signed
Est.#	addressed	addressed	addressed	addressed	addressed	identified	done daily	
158	$\sqrt{}$	V	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	no	$\sqrt{}$
209	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	no	$\checkmark$	no	$\sqrt{}$
104	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\sqrt{}$
105	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	no	$\sqrt{}$
188	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	no	no
271	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	no	$\sqrt{}$
169	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	no	$\sqrt{}$
111	$\sqrt{}$	$\sqrt{}$	no	$\checkmark$	$\checkmark$	$\checkmark$	no	$\sqrt{}$
74	$\sqrt{}$						no	$\sqrt{}$
66	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\sqrt{}$
120	V	V	V	V	V	V	V	V

Documentation was also audited from the following establishments that were not visited onsite, during the centralized document audit:

86	V	V	$\sqrt{}$	V	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
152	V	V	no	V	$\sqrt{}$	$\sqrt{}$	no	$\sqrt{}$
130	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	$\sqrt{}$
237	V	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	no	$\sqrt{}$
100	V	V		V	$\sqrt{}$	$\sqrt{}$	no	$\sqrt{}$
148	V	V		V	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
118	V	V	V	V	V	V	no	V
95	√	√		V				$\sqrt{}$

#### **Data Collection Instrument for HACCP Programs**

Each of the establishments approved to export meat products to the U.S. (except Est. 12, which was a cold-storage facility) was required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. The establishment has a flow chart that describes the process steps and product flow.
- 2. The establishment has conducted a hazard analysis that includes food safety hazards likely to occur.
- 3. The analysis includes the intended use of or the consumers of the finished product(s).
- 4. There is a written HACCP plan for each product where the hazard analysis revealed one or more food safety hazard(s) reasonably likely to occur.
- 5. All hazards identified in the analysis are included in the HACCP plan; the plan lists a CCP for each food safety hazard identified.
- 6. The HACCP plan specifies critical limits, monitoring procedures, and the monitoring frequency performed for each CCP.
- 7. The plan describes corrective actions taken when a critical limit is exceeded.
- 7. The HACCP plan was validated using multiple monitoring results.
- 9. The HACCP plan lists the establishment's procedures to verify that the plan is being effectively implemented and functioning and the frequency for these procedures.
- 10. The HACCP plan's record-keeping system documents the monitoring of CCPs and/or includes records with actual values and observations.
- 11. The HACCP plan is dated and signed by a responsible establishment official.
- 12. The establishment is performing routine pre-shipment document reviews.

#### The results of these evaluations were as follows:

	1. Flow diagram	2. Haz- ard an- alysis	3. Use & users includ-	4. Plan for each hazard	5. CCPs for all hazards	6. Mon- itoring is spec-	7. Corr. actions are des-	8. Plan valida- ted	9. Ade- quate verific.	10.Ade- quate docu-	11. Dat- ed and signed	12.Pre- shipmt. doc.
Est.#		conduct -ed	ed	muuru	Table 45	ified	cribed	tou	proced- ures	menta- tion	o.g.rea	review
158	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	no	<b>√</b>	<b>√</b>	<b>√</b>	√	√
209	√	<b>√</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	√	no	√	√	no
104	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>	<b>√</b>	√	no
105	√	<b>√</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	no	√	√	√	√	√
188	√	<b>√</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	<b>√</b>	no	no	no	no
271	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	no	<b>√</b>	<b>√</b>	<b>√</b>	no	no
169	√	<b>√</b>	<b>V</b>	<b>V</b>	no	<b>√</b>	<b>V</b>	√	√	√	√	no
111	√	<b>√</b>	<b>√</b>	<b>√</b>	√	√	no	no	no	√	√	no
74	√	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	no	<b>V</b>	√	√	no
66	√	<b>√</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>	no	√	√
120	√	<b>V</b>	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>	no	√	<b>√</b>	<b>V</b>	√	<b>√</b>

Documentation was also audited from the following establishments that were not visited on-site, during the centralized document audit:

86	√	√	<b>√</b>	<b>V</b>	<b>V</b>	√	<b>V</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	√
152	<b>V</b>	√	<b>√</b>	<b>V</b>	<b>V</b>	√	no	<b>V</b>	<b>V</b>	<b>√</b>	no	no
130	proces	-sing	casing	only	no	HA-	CCP	Requi-	red			
237	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>V</b>	<b>V</b>	<b>V</b>	√	√	√
100	√	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>	no						
148	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>V</b>	<b>V</b>	<b>V</b>	√	√	√
118	√	<b>√</b>	<b>V</b>	√	√	<b>√</b>	no	<b>√</b>	<b>√</b>	√	√	√
95	√	<b>V</b>	<b>√</b>	√	√	no	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	no

## Data Collection Instrument for Generic E. coli Testing

Each establishment (except Est. 12, which was a cold-storage facility) was evaluated to determine if the basic FSIS regulatory requirements for generic *E. coli* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written procedure for testing for generic *E. coli*.
- 2. The procedure designates the employee(s) responsible to collect the samples.
- 3. The procedure designates the establishment location for sample collecting.
- 4. The sample collection is done on the predominant species being slaughtered.
- 5. The sampling is done at the frequency specified in the procedure.
- 6. The proper carcass site(s) and/or collection methodology (sponge or excision) is/are being used for sampling.
- 7. The carcass selection is following the random method specified in the procedure or is being taken randomly.
- 8. The laboratory is analyzing the sample using an AOAC Official Method or an equivalent method.
- 9. The results of the tests are being recorded on a process control chart showing the most recent test results.
- 10. The test results are being maintained for at least 12 months.

	1.Writ-	2. Samp-	3.Samp-	4. Pre-	5. Samp-	6. Pro-	7. Samp-	8. Using	9. Chart	10. Re-
	ten pro-	ler des-	ling lo-	domin.	ling at	per site	ling is	AOAC	or graph	sults are
Est. #	cedure	ignated	cation	species	the req'd	or	random	method	of	kept at
			given	sampled	freq.	method			results	least 1 yr
158	proces	sing	only							
209	proces	sing	only							
104	proces	sing	only							
105			$\checkmark$				no	$\checkmark$		$\checkmark$
188	proces	sing	only							
271	proces	sing	only							
169	proces	sing	only							
111	V	no	no		no		$\sqrt{}$			
74		√					$\sqrt{}$			√
66	V	√	<b>√</b>	√	√	√	√	$\checkmark$		√
120	V		V				no	V		V

Documentation was also audited from the following establishments that were not visited onsite, during the centralized document audit:

86	proces	sing	only					
152	√			$\sqrt{}$	no	 	 	
130	proces	sing	only					
237	proces	sing	only					
100	proces	sing	only					
148	proces	sing	only					
118	proces	sing	only					
95	proces	sing	only					

## Data Collection Instrument for Salmonella testing

Each slaughter establishment was evaluated to determine if the basic FSIS regulatory requirements for *Salmonella* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. Salmonella testing is being done in this establishment.
- 2. Carcasses are being sampled.
- 3. Ground product is being sampled.
- 4. The samples are being taken randomly.
- 5. The proper carcass site(s) and/or collection of proper product (carcass or ground) is being used for sampling.
- 6. Establishments in violation are not being allowed to continue operations.

The results of these evaluations were as follows:

	1. Testing	2. Carcasses	3. Ground	4. Samples	5. Proper site	6. Violative
Est. #	as required	are sampled	product is	are taken	and/or	est's stop
			sampled	randomly	proper prod.	operations
158	processing	only				
209	processing	only				
104	processing	only				
105	$\sqrt{}$	$\sqrt{}$	N/A	<b>√</b>	V	$\sqrt{}$
188	processing	only				
271	processing	only				
169	processing	only				
111	$\sqrt{}$	$\sqrt{}$	N/A	<b>√</b>	V	$\sqrt{}$
74	$\sqrt{}$	$\sqrt{}$	N/A	<b>√</b>	V	$\sqrt{}$
66	V	V	N/A	V	V	V
120	V	V	N/A	V	V	V

Documentation was also audited from the following establishments that were not visited onsite, during the centralized document audit:

86	processing	only			
152	$\checkmark$	$\checkmark$	N/A	 $\sqrt{}$	
130	processing	only			
237	processing	only			
100	processing	only			
148	processing	only			
118	processing	only			
95	processing	only			